

Billing Code 4333-15

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R1-ES-2017-0051; FXES11130900000-178-FF09E42000]

RIN 1018-BC09

Endangered and Threatened Wildlife and Plants; Removing the Foskett Speckled

Dace From the List of Endangered and Threatened Wildlife

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule; availability of draft post-delisting monitoring plan.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service or USFWS), propose to

remove the Foskett speckled dace (Rhinichthys osculus ssp.), a fish native to Oregon,

from the Federal List of Endangered and Threatened Wildlife on the basis of recovery.

This determination is based on a review of the best available scientific and commercial

information, which indicates that the threats to the Foskett speckled dace have been

eliminated or reduced to the point where it no longer meets the definition of an

endangered or threatened species under the Endangered Species Act of 1973, as amended

(Act). We are seeking information and comments from the public regarding this

proposed rule and the draft post-delisting monitoring plan for the Foskett speckled dace.

DATES: We will accept comments received or postmarked on or before [INSERT]

DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Please note that if you are using the Federal eRulemaking Portal (see ADDRESSES), the

deadline for submitting an electronic comment is 11:59 p.m. Eastern time on this date.

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We must receive requests for public hearings, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by [INSERT DATE 45 DAYS AFTER

DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments by one of the following methods:

- (1) *Electronically*: Go to the Federal eRulemaking Portal: http://www.regulations.gov. In the Search box, enter FWS-R1-ES-2017-0051, which is the docket number for this rulemaking. Then click on the Search button. On the resulting page, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. You may submit a comment by clicking on "Comment Now!"
- (2) *By hard copy*: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: Docket No. FWS–R1–ES–2017–0051, U.S. Fish and Wildlife Service, MS: BPHC, 5275 Leesburg Pike, Falls Church, VA 22041-3803.

We request that you send comments only by the methods described above. We will post all comments on *http://www.regulations.gov*. This generally means that we will post any personal information you provide us (see **Information Requested**, below, for more information).

Document availability: This proposed rule and a copy of the draft post-delisting monitoring (PDM) plan referenced throughout this document can be viewed at http://www.regulations.gov under Docket No. FWS-R1-ES-2017-0051, or at the Oregon Fish and Wildlife Office's website at https://www.fws.gov/oregonfwo. In addition, the supporting file for this proposed rule will be available for public inspection by

appointment, during normal business hours, at the Oregon Fish and Wildlife Office, 2600 SE 98th Avenue, Suite 100, Portland, OR 97226; telephone 503–231–6179.

FOR FURTHER INFORMATION CONTACT: Paul Henson, State Supervisor, 2600 SE 98th Avenue, Suite 100, Portland, OR 97266; telephone: 503–231–6179; facsimile (fax): 503–231–6195. If you use a telecommunications device for the deaf (TDD), call the Federal Relay Service at 1–800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Act, a species may be removed from the Federal List of Endangered and Threatened Wildlife (List) due to recovery. A species is an "endangered species" for purposes of the Act if it is in danger of extinction throughout all or a significant portion of its range and is a "threatened species" if it is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act does not define the term "foreseeable future." The Foskett speckled dace is listed as threatened, and we are proposing to delist the species (*i.e.*, remove the species from the List) because we have determined it is not likely to become an endangered species now or within the foreseeable future. Delistings can only be made by issuing a rulemaking.

The basis for our action. Under the Act, we may determine that a species is an endangered or threatened species because of any one or a combination of five factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory

mechanisms; or (E) other natural or manmade factors affecting its continued existence. We have determined that the Foskett speckled dace is no longer at risk of extinction and has exceeded or met the following criteria for delisting described in the species' recovery plan:

- (1) Long-term protection of habitat, including spring source aquifers, spring pools and outflow channels, and surrounding lands, is assured;
- (2) Long-term habitat management guidelines are developed and implemented to ensure the continued persistence of important habitat features and include monitoring of current habitat and investigation for and evaluation of new spring habitats; and
- (3) Research into life history, genetics, population trends, habitat use and preference, and other important parameters is conducted to assist in further developing and/or refining criteria (1) and (2), above.

As per recovery criterion (2), we consider the Foskett speckled dace to be a conservation-reliant species¹ (see Scott *et al.* 2010, entire), given that it requires active management to maintain suitable habitat. To address this management need, the Bureau of Land Management (BLM), the Oregon Department of Fish and Wildlife (ODFW), and the Service developed and are implementing the Foskett Speckled Dace (*Rhinichthys osculus* ssp.) Cooperative Management Plan (CMP; USFWS *et al.* 2015), and are committed to the continuing long-term management of this species.

Information Requested

Public Comments

¹We define conservation-reliant species in this case as those that have generally met recovery criteria but require continued active management to sustain the species and associated habitat in a recovered condition.

We intend that any final action resulting from this proposal will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other governmental or State agencies, Tribes, the scientific community, industry, or other interested parties concerning this proposed rule. The comments that will be most useful and likely to influence our decisions are those supported by data or peer-reviewed studies and those that include citations to, and analyses of, applicable laws and regulations. Please make your comments as specific as possible and explain the basis for them. In addition, please include sufficient information with your comments to allow us to authenticate any scientific or commercial data you reference or provide. We particularly seek comments concerning:

- (1) Reasons why we should or should not remove Foskett speckled dace from the Federal List of Endangered and Threatened Wildlife (*i.e.*, "delist" the fish under the Act);
- (2) New biological or other relevant data concerning any threat (or lack thereof) to this fish (*e.g.*, those associated with climate change);
- (3) New information on any efforts by the State or other entities to protect or otherwise conserve the Foskett speckled dace or its habitat;
- (4) New information concerning the range, distribution, and population size or trends of this fish;
- (5) New information on the current or planned activities in the habitat or range of the Foskett speckled dace that may adversely affect or benefit the fish; and
- (6) Information pertaining to the requirements for post-delisting monitoring of the Foskett speckled dace.

Please note that submissions merely stating support for or opposition to the action under consideration without providing supporting information, although noted, may not meet the standard of information required by section 4(b)(1)(A) of the Act (16 U.S.C. 1531 *et seq.*), which directs that determinations as to whether any species is an endangered or threatened species must be made "solely on the basis of the best scientific and commercial data available."

Prior to issuing a final rule to implement this proposed action, we will take into consideration all comments and any additional information we receive. Such information may lead to a final rule that differs from this proposal. All comments and recommendations, including names and addresses, will become part of the administrative record.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We will not consider comments sent by email, fax, or to an address not listed in **ADDRESSES**. We will not consider hand-delivered comments that we do not receive, or mailed comments that are not postmarked by, the date specified in **DATES**. If you submit information via http://www.regulations.gov, your entire submission—including any personal identifying information—will be posted on the website. Please note that comments posted to this website are not immediately viewable. When you submit a comment, the system receives it immediately. However, the comment will not be publicly viewable until we post it, which might not occur until several days after submission.

If you mail or hand-deliver hardcopy comments that include personal identifying information, you may request at the top of your document that we withhold this

information from public review. However, we cannot guarantee that we will be able to do so. To ensure that the electronic docket for this rulemaking is complete and all comments we receive are publicly available, we will post all hardcopy submissions on http://www.regulations.gov.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule and draft post-delisting monitoring (PDM) plan, will be available for public inspection on http://www.regulations.gov, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office (see *Document availability* under **ADDRESSES**, above).

Public Hearing

Peer Review

Section 4(b)(5)(E) of the Act provides for one or more public hearings on this proposal, if requested. We must receive requests for public hearings, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** within 45 days after the date of this **Federal Register** publication (see **DATES**, above). We will schedule at least one public hearing on this proposal, if any are requested, and announce the dates, times, and location(s) of any hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** at least 15 days before the first hearing.

In accordance with our policy, "Notice of Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities," which was published on July 1, 1994 (59 FR 34270), we will seek the expert opinion of at least three appropriate independent specialists regarding this proposed rule as well as the draft PDM plan. The purpose of

peer review is to ensure that decisions are based on scientifically sound data, assumptions, and analyses. These reviews will be completed during the public comment period.

We will consider all comments and information we receive during the comment period on this proposed rule as we prepare the final determination. Accordingly, the final decision may differ from this proposal.

Background

Previous Federal Actions

We published a final rule listing the Foskett speckled dace as threatened in the **Federal Register** on March 28, 1985 (50 FR 12302). This rule also found that the designation of critical habitat was not prudent because it would increase the likelihood of vandalism to the small, isolated springs that support this species. On April 27, 1998, a recovery plan was completed for the Foskett speckled dace as well as two other fish of the Warner Basin and Alkali Subbasin (USFWS 1998).

On March 25, 2009 (USFWS 2009, entire), a 5-year review of the Foskett speckled dace status was completed, recommending no change in listing status. On February 18, 2014, we published a notice in the **Federal Register** announcing the initiation of 5-year status reviews and information requests for five species, including the Foskett speckled dace (79 FR 9263). No information was received from this request. The second 5-year review, completed on October 26, 2015 (USFWS 2015, entire), concluded that the status of the Foskett speckled dace had substantially improved since the time of listing according to the definitions of "endangered species" and "threatened

species" under the Act and recommended that the Foskett speckled dace be considered for delisting.

Species Description

The Foskett speckled dace (*Rhinichthys osculus* ssp.) is in the family Cyprinidae (Girard 1857) and is represented by two populations in Lake County, Oregon: a natural population that inhabits Foskett Spring on the west side of Coleman Lake, and an introduced population at Dace Springs (USFWS 1998, p. 14). The Foskett speckled dace is a small, elongate, rounded minnow (4 inches (in) (10 centimeters (cm)) with a flat belly. The snout is moderately pointed, the eyes and mouth are small, and ventral barbels (*i.e.*, whisker-like sensory organs near the mouth) are present. Foskett speckled dace have eight dorsal fin rays and seven anal fin rays, and the caudal fin is moderately forked (USFWS 1998, p. 8). The color of its back is dusky to dark olive; the sides are grayish green, with a dark lateral stripe, often obscured by dark speckles or blotches; and the fins are plain. Breeding males are reddish on the lips and fin bases.

Life History

Relatively little is known about the biology of the Foskett speckled dace. Fish breed at age 1 year, and spawning begins in March to April and extends into July; individual fish can live for at least 4 years (Scheerer *et al.* 2015, p. 2). Length-frequency histograms suggest the presence of multiple age classes and that successful reproduction occurs annually (Sheerer and Jacobs 2009, p. 5). Young-of-the-year fish are more common in the shallow marsh habitats (Scheerer *et al.* 2016, p. 3). Presumably, similar to other dace, Foskett speckled dace require rock or gravel substrate for egg deposition

(Sigler and Sigler 1987, p. 208). The taxonomy of the Foskett speckled dace is summarized in the species' 5-year review (USFWS 2015).

Distribution

The Foskett speckled dace is endemic to Foskett Spring in the Warner Basin, in southeastern Oregon (see Figure 1). The historical known natural range of the Foskett speckled dace is limited to Foskett Spring. At the time of listing in 1985, Foskett speckled dace also occurred at nearby Dace Spring where translocation was initiated in 1979 (Williams *et al.* 1990, p. 243).

Foskett speckled dace were probably distributed throughout prehistoric Coleman Lake (see Figure 1) during times that it held substantial amounts of water. The timing of the isolation between the Warner Lakes and the Coleman Lake Subbasin is uncertain although it might have been as recent as 10,000 years ago (Bills 1977, entire). As Coleman Lake dried, the salt content of the water increased and suitable habitat would have been reduced from a large lake to spring systems that provided adequate freshwater.

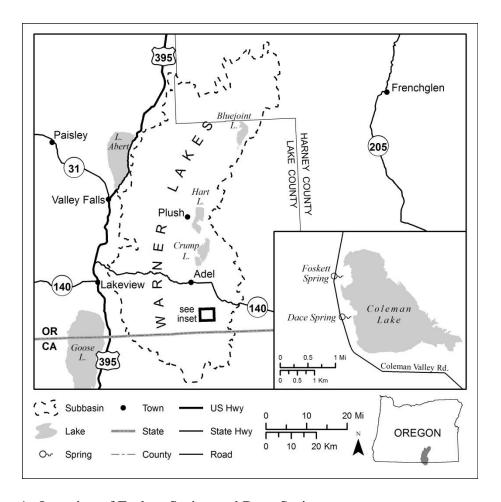


Figure 1. Location of Foskett Spring and Dace Spring.

Given that both Foskett and Dace springs were historically below the surface of Coleman Lake, it is reasonable to assume that Foskett speckled dace occupied Dace Spring at some point in the past although none was documented in the 1970s. Beginning in 1979, Foskett speckled dace were translocated into the then-fishless Dace Spring to attempt to create a second population (see discussion below, under *Abundance*). *Habitat*

Foskett Spring is a small, natural spring that rises from a springhead pool that flows through a narrow, shallow spring brook into a series of shallow marshes, and then disappears into the soil of the normally dry Coleman Lake (Scheerer *et al.* 2016, p. 1). Foskett Spring is a cool-water spring with temperatures recorded at a constant 64.8

degrees Fahrenheit (°F) (18.2 degrees Celsius (°C)) (Scheerer and Jacobs 2009, p. 5). The spring water is clear, and the water flow rate is less than 0.5 cubic feet (ft³) per second (0.01 cubic meters (m³) per second). The springhead pool has a loose sandy bottom and is heavily vegetated with aquatic plants. The ODFW estimated approximately 864 square yards (yds²) (722 square meters (m²)) of wetland habitat are associated with the Foskett Spring area, including the spring pool, spring brook, tule marsh, cattail marsh, and sedge marsh (Scheerer and Jacobs 2005, p. 6; hereafter "marsh" unless otherwise noted). Foskett speckled dace occur in all the wetlands habitats associated with the spring. The fish use overhanging bank edges, grass, exposed grass roots, and filamentous algae as cover. In 1987, the BLM acquired the property containing both Foskett and Dace springs and the surrounding 161 acres (ac) (65 hectares (ha)), of which approximately 69 ac (28 ha) were fenced to exclude cattle from the two springs. After fencing and cattle exclusion, encroachment by aquatic vegetation reduced the open-water habitat (Sheerer and Jacobs 2007, p. 9). This is a common pattern in desert spring ecosystems and has resulted in reductions of fish populations at other sites (see Kodric-Brown and Brown 2007).

In 2005, 2007, and 2009, the ODFW considered Foskett speckled dace habitat to be in good condition, but limited in extent (Scheerer and Jacobs 2005, p. 7; 2007, p. 9; and 2009, p. 5). They noted that encroachment by aquatic plants may be limiting the population and that a decline in abundance of Foskett speckled dace since 1997 was probably due to the reduction in open-water habitat. Deeper water with moderate vegetative cover would presumably be better habitat, judging from the habitats used by other populations of speckled dace, although Dambacher *et al.* (1997, no pagination)

noted that past habitat management to increase open-water habitat has been unsuccessful in the long run due to sediment infilling and regrowth of aquatic plants. To address the encroachment by aquatic vegetation, in 2013, the BLM implemented a controlled burn in the surrounding marshes to reduce vegetation biomass. In 2013 and 2014, the BLM hand-excavated 11 pools and increased the open-water habitat by 196 yds² (164 m²) (Scheerer *et al.* 2014, p. 9). The response of Foskett speckled dace to this habitat enhancement was substantial but relatively short-lived (see *Abundance*, below).

Dace Spring is approximately 0.5 mile (mi) (0.8 kilometer (km)) south of Foskett Spring and is smaller than Foskett Spring. Baseline water quality and vegetation monitoring at Foskett and Dace springs were initiated by the BLM in 1987. Data collected on September 28, 1988, documented that the springs had similar water chemistry, temperature, and turbidity (Williams *et al.* 1990, p. 244). To increase openwater habitat, the BLM and the Service worked together in 2009, to construct two ponds connected to the outlet channel of Dace Spring. In 2013, the BLM reconfigured the inlet and outlet to the two ponds, allowing greater water flow and improving water quality (Scheerer *et al.* 2013, p. 8).

Abundance

The population of Foskett speckled dace has been monitored regularly by the ODFW since 2005, and, while variable, the population appears to be resilient (*i.e.*, ability of a species to withstand natural variation in habitat conditions and weather as well as random events). General observations made during these population surveys included the presence of multiple age-classes and the presence of young-of-the-year, which indicates that breeding is occurring and young are surviving for multiple years. Bond (1974)

visually estimated the population in Foskett Spring to be between 1,500 and 2,000 individuals in 1974. In 1997, the ODFW obtained mark-recapture population estimates at both Foskett and Dace springs (Dambacher et al. 1997, no pagination). The Foskett Spring estimate was 27,787 fish, and the majority of the fish (97 percent) occurred in an open-water pool located in the marsh outside of the existing Foskett Spring cattle exclosure. Since 1997, population estimates have varied from 751 to 24,888 individuals (Table 1). The data in Table 1 were obtained using the Lincoln-Petersen model (1997– 2012), the Huggins closed-capture model (2011–2014), and a state-space model (2015– 2016). Estimates were not calculated by habitat type using the Huggins model in 2011, because length-frequency data were not available for each habitat location (Scheerer et al. 2015, pp. 4–7; Scheerer et al. 2013, p. 5; Scheerer et al. 2014, p. 6; Scheerer et al. 2016, p. 6). Different models have been used to estimate abundance through time to provide the most accurate and robust estimates; for example, it was determined that the Lincoln-Petersen estimator had underestimated abundance (Peterson et al. 2015). Abundance declined substantially from 1997 through 2012, a period when aquatic plants substantially expanded into open-water habitats (Scheerer et al. 2016, p. 9). The higher population estimates from 2013 through 2015 were attributed to habitat management that increased open-water habitat (see below) and most fish occurred in maintained habitats (Scheerer et al. 2016, p. 9). The population decline documented in 2016 in Foskett Spring was likely a result of vegetation regrowth into the excavated areas (Scheerer et al. 2016, pp. 6-9). As a result of the vegetation regrowth and population decline in 2016, and consistent with the CMP, the BLM conducted an extensive habitat enhancement project in 2017, excavating approximately 300 cubic yards (yds²) (251 m²) of vegetation

and accumulated sediment in the Foskett Spring pool, stream, and portions of the wetland, resulting in a significant increase in open-water habitat. Prior to initiating this enhancement project in 2017, the ODFW conducted a population survey that estimated 4,279 dace in Foskett Spring (95 percent CI: 3,878-4,782), a moderate increase in the estimate from the prior year (1,830) (P. Scheerer, ODFW, pers. comm. 2017). As noted previously, and as illustrated in Table 1 below, the variability in abundance is not uncommon for this species and appears in part to be driven by the availability of openwater habitat. Given information gained from prior habitat enhancement actions at Foskett and Dace springs, we anticipate the extensive habitat enhancement work conducted by the BLM in 2017 will support an increase in abundance in coming years.

Table 1. Foskett Spring: Population estimates with 95 percent confidence intervals of Foskett speckled dace by habitat type.

		Habitat Type or Location					
Model	Yr ¹	Spring Pool	Spring brook	Tule marsh	Cattail marsh	Entire site ²	Management
	1997	204 (90–317)	702 (1,157–2,281)	no sample	26,881 (13,158–	27,787 (14,057–	none
		(50 317)	(1,13 / 2,201)		40,605)	41,516)	
	2005	1,627	755	425	353	3,147	none
Lincoln-		(1,157–2,284)	(514–1,102)	(283–636)	(156–695)	(2,535–3,905)	
Petersen	2007	1,418	719	273	422	2,984	none
1 ctcrsen		(1,003–1,997)	(486–1,057)	(146–488)	(275–641)	(2,403–3,702)	
	2009	247	1,111	1,062	158	2,830	none
		(122–463)	(774–1,587)	(649–1,707)	(57–310)	(2,202–3,633)	none
	2011	322	262	301	751	none	
		(260–399)	(148–449)	(142–579)	v	(616–915)	none

		Habitat Type or Location					
Model	Yr ¹	Spring Pool	Spring brook	Tule marsh	Cattail marsh	Entire site ²	Management
	2012	404 (354–472)	409 (357–481)	220 (159–357)	0	988 (898–1,098)	Controlled burn
	2011	NA ³	NA	NA	NA	1,728 (1,269–2,475)	none
Huggins	2012	633 (509–912)	589 (498–1024)	625 (442–933)	0	1,848 (1,489–2,503)	Controlled burn
Tuggms	2013	2,579 (1,985–3,340)	638 (566–747)	6,891 (5,845– 8,302)	3,033 (2,500–3,777)	13,142 (1,157–2,284)	Pool excavation and hand excavation of spring brook and marshes

		Habitat Type or Location					
Model	Yr ¹	Spring Pool	Spring brook	Tule marsh	Cattail marsh	Entire site ²	Management
	2014	2,843 (2,010–3,243)	7,571 (2,422– 13,892)	11,595 (7,891– 12,682)	2,936 (1,757–7,002)	24,888 (19,250– 35,510)	Pool excavation and hand excavation of spring brook and marshes
	2015	698 (520–2,284)	11,941 (5,465– 15,632)	3,662 (2,158– 6,565)	38 (8–111)	16,340 (10,980– 21,577)	none
State- space	2016	138 (122–226)	656 (609–1240)	1,021 (926–1245)	14 (12–19)	1,830 (1,694–2,144)	none
-	2017	925	1,032	2,322	NA ⁴	4,279 3,878-4,782	Mechanical excavation to deepen the open water pools and channels

¹ Note that there are two population estimates (*i.e.* Lincoln-Petersen and Huggins) for 2011 and 2012.

² Site estimate totals were calculated from the total number of marked and recaptured fish and are not the sum of the estimates for the habitat types.

³ No estimates were calculated; see (Scheerer *et al.* 2015, pp. 4-7).

⁴ The cattail marsh habitat was too shallow to survey in 2017.

No Foskett speckled dace were documented in Dace Spring in the 1970s. In 1979 and 1980, individuals were translocated from Foskett Spring to Dace Spring (Williams et al. 1990, p. 243; see Table 2). Although an estimated 300 fish were documented in 1986 (Williams et al. 1990, p. 243), this initial effort failed to establish a population at Dace Spring due to a lack of successful recruitment (Dambacher *et al.* 1997, no pagination). Only 19 fish were observed in 1997, and subsequent surveys failed to locate individuals in Dace Springs (Scheerer and Jacobs 2005, p. 2). In 2009, two pools were created at Dace Spring to increase open-water habitat and additional individuals were moved to the spring. Although recruitment was documented, major algal blooms and periods of low dissolved oxygen resulted in low survival (Scheerer et al. 2012, p. 8). Habitat manipulation by the BLM in 2013 improved water quality, and recruitment was documented in 2014 and 2015 (Scheerer et al. 2014, p. 6; Scheerer et al. 2015, p. 5). The two constructed pools at Dace Spring are currently providing additional habitat and may continue to serve as a refuge population for Foskett speckled dace. Based on 2017 population estimates, Dace Spring numbers have increased dramatically since 2013 (Table 2). The population estimates in Table 2 were made with 95 percent confidence intervals, translocations, and habitat management (Williams et al. 1990, p. 243; Dambacher et al. 1997, no pagination; Scheerer and Jacobs 2005, p. 2; Scheerer et al. 2012, p. 1; Scheerer et al. 2013, pp. 2, 8; Scheerer at al. 2014, pp. 6, 9; Scheerer et al. 2015, p. 5; Scheerer et al. 2016, p. 6; Scheerer et. al. 2017, p. 6).

 Table 2. Dace Spring:
 Summary of Foskett speckled dace population estimates.

Year	Population estimate	Number translocated	Habitat management	
Pre-1979	0	none	none	
1979	no estimate	50	none	
1980	no estimate	50	none	
1986	300 ¹	none	none	
1997	<201	none	none	
2005	0	none	none	
2009	no estimate	none	construction of 2 pools	
2010	no estimate	49	none	
2011	34 (11–36)	75	none	
2012	13 ²	none	none	
2013	34 (17–62)	200	construction of flow through channels	
2014	552 (527–694)	324	none	
2015	876 (692–1,637)	none	none	
2016	1,964 (1,333–4,256)	none	none	

T 7	Population	Number	Habitat management	
Year	estimate	translocated		
2017	15,729 12,259-58,479	none	none	

¹No confidence interval calculated.

Recovery Planning and Recovery Criteria

Section 4(f) of the Act directs us to develop and implement recovery plans for the conservation and survival of endangered and threatened species unless we determine that such a plan will not promote the conservation of the species. Under section 4(f)(1)(B)(ii), recovery plans must, to the maximum extent practicable, include objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of section 4 of the Act, that the species be removed from the List. However, revisions to the List (i.e., adding, removing, or reclassifying a species) must reflect determinations made in accordance with sections 4(a)(1) and 4(b) of the Act. Section 4(a)(1) requires that the Secretary determine whether a species is endangered or threatened (or not) because of one or more of five threat factors. Section 4(b) of the Act requires that the determination be made "solely on the basis of the best scientific and commercial data available." Therefore, recovery criteria should help indicate when we would anticipate an analysis of the five threat factors under section 4(a)(1) would result in a determination that the species is no longer an endangered species or threatened species after evaluating the five statutory factors (see Summary of Factors Affecting the Species, below).

² In 2012, there were a known total of 13 individuals.

While recovery plans provide important guidance to the Service, States, and other partners on methods of minimizing threats to listed species and measurable objectives against which to measure progress towards recovery, they are not regulatory documents and cannot substitute for the determinations and promulgation of regulations required under section 4(a)(1) of the Act. A decision to revise the status of a species or remove it from the List is ultimately based on analysis of the best scientific and commercial data available to determine whether a species is no longer considered endangered or threatened, regardless of whether that information differs from the recovery plan.

Recovery plans may be revised to address continuing or new threats to the species as new substantive information becomes available. The recovery plan identifies site-specific management actions that will help recover the species, measurable criteria that set a trigger for eventual review of the species' listing status (*e.g.*, under a 5-year review conducted by the Service), and methods for monitoring recovery progress. Recovery plans are intended to establish goals for long-term conservation of listed species and define criteria that are designed to indicate when the threats facing a species have been removed or reduced to such an extent that the species may no longer need the protections of the Act.

There are many paths to accomplishing recovery of a species, and recovery may be achieved without all criteria being fully met. For example, one or more criteria may be exceeded while other criteria may not yet be met. In that instance, we may determine that the threats are minimized sufficiently to delist. In other cases, recovery opportunities may be discovered that were not known when the recovery plan was finalized. These opportunities may be used instead of methods identified in the recovery plan. Likewise,

information on the species may be learned that was not known at the time the recovery plan was finalized. The new information may change the extent that criteria need to be met for recognizing recovery of the species. Recovery of a species is a dynamic process requiring adaptive management that may, or may not, fully follow the guidance provided in a recovery plan.

The Oregon Desert Fishes Working Group has been proactive in improving the conservation status of the Foskett speckled dace. This group of Federal and State agency biologists, academicians, and others has met annually since 2007 to: (1) Share species' status information; (2) share results of new research; and (3) assess ongoing threats to the species.

The primary conservation objective in the Foskett speckled dace recovery plan is to enhance its long-term persistence through the conservation and enhancement of its limited range and habitat (USFWS 1998, entire). The recovery plan states that the Foskett speckled dace spring habitat is currently stable, but extremely restricted, and any alterations to the spring or surrounding activities that indirectly modify the spring could lead to the extinction of this species. While the recovery plan does not explicitly tie the recovery criteria to the five listing factors in section 4(a)(1) of the Act, our analysis of whether the species has achieved recovery is based on these five factors, which are discussed in the **Summary of Factors Affecting the Species** section, below. The recovery plan outlines three recovery criteria to assist in determining when the Foskett speckled dace has recovered to the point that the protections afforded by the Act are no longer needed, which are summarized below. A detailed review of the recovery criteria for the Foskett speckled dace is presented in the species' 5-year review (USFWS 2015),

which is available online at https://ecos.fws.gov/docs/five_year_review/doc4758.pdf, at https://ecos.fws.gov/docs/five_year_review/doc4758.pdf, at https://ecos.fws.gov/docs/five_year_review/doc4758.pdf, at https://ecos.fws.gov/docs/five_year_review/doc4758.pdf, and recommended that the species be proposed for delisting (USFWS 2015, p. 29). The Foskett speckled dace has exceeded or met the following criteria for delisting described in the recovery plan:

Recovery Criterion 1: Long-term protection to habitat, including spring source aguifers.

Recovery Criterion 1: Long-term protection to habitat, including spring source aquifers, spring pools and outflow channels, and surrounding lands, is assured.

Criterion 1 has been met. In 1987, the BLM acquired and now manages the 160-ac (65-ha) parcel of land containing both Foskett and Dace springs (see below) and fenced 70 ac (28 ha) to exclude cattle from both springs, although the fence does not include the entire occupied habitat for Foskett speckled dace. The acquisition of this parcel of land by the BLM was specifically to provide conservation benefit to the Foskett speckled dace. We anticipate continued ownership of this habitat by the BLM in the future in part due to direction in the BLM's Lakeview District Resource Management Plan (RMP), which includes a management goal of retaining public land with high public resource values and managing that land for the purpose for which it was acquired (BLM 2003, p. 92). Additional support for continued ownership and management of the site by the BLM rests in the Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1701 et seq.), as amended, which directs the BLM to manage public land to provide habitat for fish and aquatic wildlife and to protect the quality of water resources. Lastly, continued ownership and management by the BLM, and the protections afforded

to Foskett and Dace springs from public ownership, is supported by the BLM's involvement as a cooperating agency in the development and implementation of the CMP finalized in August 2015 (USFWS *et al.* 2015).

While little information is available regarding spring flows or the status of the aquifer, the aquifer has limited capability to produce water for domestic or stock use (Gonthier 1985, p. 7). Given this, few wells exist in the Warner Valley and thus are not likely to impact Foskett or Dace springs. Recovery Criterion 1 addresses listing factor A (present or threatened destruction, modification, or curtailment of its habitat or range). Recovery Criterion 2: Long-term habitat management guidelines are developed and implemented to ensure the continued persistence of important habitat features and include monitoring of current habitat and investigation for and evaluation of new spring habitats.

Criterion 2 has been met. With the understanding that the Foskett speckled dace is a conservation-reliant species, the BLM, ODFW, and Service developed a CMP (USFWS *et al.* 2015) that outlines long-term management actions necessary to provide for the continued persistence of habitats important to Foskett speckled dace. The CMP was agreed to, finalized, and signed by the Service, BLM, and ODFW in August 2015. The cooperating parties committed to the following actions: (1) Protect and manage Foskett speckled dace habitat; (2) enhance the habitat when needed; (3) monitor Foskett speckled dace populations and habitat; and (4) implement an emergency contingency plan as needed to address potential threats from the introduction of nonnative species, pollutants, or other unforeseen threats (USFWS *et al.* 2015, p. 3).

Although the CMP is a voluntary agreement among the three cooperating agencies, it is reasonable to conclude the plan will be implemented into the foreseeable

future for multiple reasons. First, each of the cooperating agencies have established a long record of engagement in conservation actions for Foskett speckled dace, including the BLM's prior contributions through land acquisition and three decades of habitat management at Foskett and Dace springs; scientific research and monitoring by the ODFW dating back to 1997; and funding support, coordination of recovery actions, and legal obligations by the Service to monitor the species into the future under the Foskett speckled dace post-delisting monitoring plan. In addition, all three cooperating agencies are active participants in the Oregon Desert Fishes Working Group, an interagency group facilitated by the Service that meets annually to discuss recent monitoring and survey information for multiple fish species, including Foskett speckled dace, as well as to coordinate future monitoring and management activities.

Second, implementation of the CMP is already underway. The BLM has conducted quarterly site visits to determine the general health of the local spring environment using photo point monitoring techniques. In 2017, the BLM conducted an extensive habitat enhancement project by excavating approximately 300 yards (yds²) (251 m²) of vegetation and accumulated sediment in the Foskett Spring pool, stream, and portions of the wetland, resulting in a significant increase in open-water habitat. The BLM also provided funding to the ODFW to conduct population estimates of Foskett speckled dace. The ODFW provided personnel and technical assistance to the BLM for the above-mentioned excavation work in 2017, and they conducted an abundance estimate in 2017 to keep track of the long-term trend of the population. The Service provided personnel and technical assistance to the BLM for the 2017 excavation work

and provided funding to the ODFW in 2015, 2016, and 2017 to conduct population estimates in Foskett and Dace springs.

Third, the conservation mission and authorities of these agencies authorize this work even if the species is delisted. For example, the Lakeview District BLM's Resource Management Plan (RMP) and BLM Manual 6840.06E both provide general management direction for Special Status Species, including the Foskett speckled dace. The FLPMA also directs the BLM to manage public land to provide habitat for fish and aquatic wildlife and to protect the quality of water resources. The ODFW's State of Oregon Wildlife Diversity Plan (Oregon Administrative Rule (OAR) 635-100-0080), Oregon Native Fish Conservation Policy (OAR 636-007-0502), and the Oregon Conservation Strategy (ODFW 2016) each provide protective measures for the conservation of native fish including Foskett speckled dace, which will remain on the ODFW's sensitive species list even we remove it from the Federal List. The Service is authorized to assist in the protection of fish and wildlife and their habitats under authorities provided by the Act (16 U.S.C. 1536), the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), and the Fish and Wildlife Act of 1956 (16 U.S.C. 742a–742j, not including 742 d-1).

Fourth, there is a practical reason to anticipate implementation of the CMP into the foreseeable future: the CMP actions are technically not complicated to implement, and costs are relatively low. We also have confidence that the actions called for in the CMP will be effective in the future because they have already proven effective as evidenced by the information collected from recent habitat actions and associated monitoring (Scheerer *et al.* 2016, entire).

Lastly, if the CMP is not adhered to by the cooperating agencies or an evaluation by the Service suggests the habitat and population numbers are declining, the Service would evaluate the need to again add the species to the List (i.e., "relist" the species) under the Act. Taken together, it is therefore reasonable to conclude that the CMP will be implemented as anticipated and that the long-term recovery of Foskett speckled dace will be maintained and monitored adequately.

Criterion 2 has been further met by the establishment of a refuge population of Foskett speckled dace at nearby Dace Spring. As described earlier in this proposed rule, dating back to 1979, multiple unsuccessful attempts were made to create a refuge population of Foskett speckled dace at Dace Spring. More recent actions have been more successful. Habitat modification at Dace Spring by the BLM, first in 2009 and again in 2013, and translocation of dace from Foskett Spring to Dace Spring by the ODFW in 2010, 2011, 2013, and 2014, have resulted in a population estimated in 2017 to be 15,729 fish (Table 2, above). Natural recruitment was documented in 2014, 2015, and 2016 (Scheerer *et al.* 2016, p. 6).

While our proposal to delist Foskett speckled dace is not dependent on the existence of a second population, the redundancy of a second population of Foskett speckled dace, should it prove viable over the long term, provides increased resiliency to the species' overall status and may reduce vulnerability to stochastic events and any future threats that may appear on the landscape.

Recovery Criterion 3: Research into life history, genetics, population trends, habitat use and preference, and other important parameters is conducted to assist in further developing and/or refining criteria 1 and 2 above.

This criterion has been met through population surveys by the ODFW and the Service, and investigations into the genetic relatedness of Foskett speckled dace in comparison with other nearby dace populations. In 1997, the Service contracted the ODFW to conduct an abundance survey and develop a population estimate for the Foskett speckled dace. In 2005, 2007, 2009, and 2011 through 2017, the Service again contracted the ODFW to obtain mark-recapture population estimates for both Foskett and Dace springs. At the former, habitat-specific population estimates were developed. Captured fish were measured to develop length-frequency histograms to document reproduction. In addition to collecting abundance data, ODFW staff mapped wetland habitats, monitored vegetation, and measured temperature and water quality at both springs during each survey. Together, the population estimates and habitat mapping confirmed the relationship between open-water habitat and fish abundance (Sheerer et al. 2016, p. 8). Water quality monitoring highlighted the need for habitat enhancement at Dace Springs. Thus, these data assisted in further developing and/or refining recovery criteria 1 and 2.

Summary of Factors Affecting the Species

Section 4 of the Act and its implementing regulations (50 CFR part 424) set forth the procedures for listing species, reclassifying species, or removing species from listed status. "Species" is defined by the Act as including any species or subspecies of fish or wildlife or plants, and any distinct vertebrate population segment of fish or wildlife that interbreeds when mature (16 U.S.C. 1532(16)). A species may be determined to be an endangered or threatened species because of any one or a combination of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction,

modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We must consider these same five factors in delisting a species. We may delist a species according to 50 CFR 424.11(d) if the best available scientific and commercial data indicate that the species is neither endangered nor threatened for the following reasons: (1) The species is extinct; (2) the species has recovered and is no longer endangered or threatened; and/or (3) the original scientific data used at the time the species was classified were in error.

A recovered species is one that no longer meets the Act's definition of endangered or threatened. Determining whether a species is recovered requires consideration of the same five categories of threats specified in section 4(a)(1) of the Act. For species that are already listed as endangered or threatened, this analysis of threats is an evaluation of both the threats currently facing the species and the threats that are reasonably likely to affect the species in the foreseeable future following delisting or downlisting (*i.e.*, reclassification from endangered to threatened) and the removal or reduction of the Act's protections.

A species is "endangered" for purposes of the Act if it is in danger of extinction throughout all or a "significant portion of its range" and is "threatened" if it is likely to become endangered within the foreseeable future throughout all or a "significant portion of its range." The word "range" in the significant portion of its range phrase refers to the range in which the species currently exists. For the purposes of this analysis, we will evaluate whether the currently listed species, the Foskett speckled dace, should be

considered endangered or threatened throughout all of its range. Then we will consider whether there are any significant portions of the Foskett speckled dace's range where the species is in danger of extinction or likely to become so within the foreseeable future.

The Act does not define the term "foreseeable future." For the purpose of this proposed rule, we defined the "foreseeable future" to be the extent to which, given the amount and substance of available data, we can anticipate events or effects, or reliably extrapolate threat trends, such that we reasonably believe that reliable predictions can be made concerning the future as it relates to the status of the Foskett speckled dace.

Based on population monitoring that began in 1997 by the ODFW, it has been established that the Foskett speckled dace population is variable, and the variability is directly linked to the amount of open-water habitat (Scheerer *et al.* 2016, p. 8). There is no evidence to indicate that this relationship will change in the future. There also is no reason to expect local changes to ground water levels (see Factor A discussion, below), and climate changes modeled over the next 30 plus years (*i.e.*, through 2049) are not predicted to impact the Foskett speckled dace (see Factor E discussion, below).

Based on 30 years of the BLM owning and managing habitat at Foskett and Dace springs, 20 years of population monitoring by the ODFW, modeling of climate change impacts that suggest little change in environmental conditions over the next 30 years in the Warner Lakes Basin, and agency commitments in the CMP to manage habitat and monitor population status of the Foskett speckled dace by the three agency cooperators, we determine it is reasonable to define the foreseeable future for the Foskett speckled dace as 30 years. In considering what factors might constitute threats, we must look beyond the exposure of the species to a particular factor to evaluate whether the species

may respond to the factor in a way that causes actual impacts to the species. If there is exposure to a factor and the species responds negatively, the factor may be a threat, and during the status review, we attempt to determine how significant a threat it is. The threat is significant if it drives or contributes to the risk of extinction of the species, such that the species warrants listing as endangered or threatened as those terms are defined by the Act. However, the identification of factors that could impact a species negatively may not be sufficient to compel a finding that the species warrants listing. The information must include evidence sufficient to suggest that the potential threat is likely to materialize and that it has the capacity (*i.e.*, it should be of sufficient magnitude and extent) to affect the species' status such that it meets the definition of endangered or threatened under the Act.

Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

The Service listed the Foskett speckled dace as threatened in 1985 (50 FR 12302; March 28, 1985), due to the species' very restricted range, its low abundance, and extremely restricted and vulnerable habitat which was being modified. Adverse factors that were identified in the final listing rule included groundwater pumping for irrigation, excessive trampling of the habitat by livestock, channeling of the springs for agricultural purposes, other mechanical modifications of the aquatic ecosystem, and livestock water uses. The vulnerability of the habitat was accentuated by its very small size and a water flow rate of less than 0.5 cubic feet (ft³) per second (0.01 cubic meters (m³) per second) (50 FR 12304).

Livestock Use and Mechanical Modification

Trampling of the wetland habitat was evident at the time of listing. Grazing cattle affects the form and function of stream and pool habitat by hoof shearing, compaction of soils, and mechanical alteration of the habitat. Since the listing, the BLM acquired the property containing Foskett and Dace springs by land exchange in 1987, and fenced 70 ac (28 ha) of the 160-ac (65-ha) parcel to exclude cattle from both Foskett and Dace springs as well as the two recently constructed ponds. While the exclusion of cattle likely improved water quality and habitat stability, it may have played a role in increasing the extent of encroaching aquatic vegetation.

Although most of the habitat was excluded from grazing, a portion of the occupied habitat was not included in the fenced area. Examining the population trends within this unfenced habitat illustrates the variability of the population and the ability of the population to respond to management. In 1997, 97 percent of the estimated population of Foskett speckled dace was located in a shallow open-water pool in the cattail marsh (hereafter marsh) outside of the Foskett Spring exclosure fence. This marsh was dry in 1989 (Dambacher *et al.* 1997, no pagination), illustrating the variability in habitat conditions of this wetland system.

In 2007, 14 percent of the estimated population of 2,984 Foskett speckled dace was located in the marsh outside of the exclusion fence (Scheerer and Jacobs 2007, p. 7), and trampling of the wetland habitat by cattle was evident (USFWS 2015, p. 19).

In 2011 and 2012, no Foskett speckled dace were detected in the marsh outside of the exclusion fence (Scheerer *et al.* 2014, p. 6). In response, the BLM conducted a controlled burn in 2013; and in 2013 and 2014, they excavated open-water habitat in the marsh. In 2013, over 13,000 Foskett speckled dace were detected, with nearly 10,000

being in the restored marsh (Scheerer *et al.* 2013, p. 9). In 2014, nearly 25,000 Foskett speckled dace were detected, with nearly 19,000 being in the restored marsh (Scheerer *et al.* 2014, p. 9). Unfortunately, the marsh and excavated pools outside the fence quickly grew dense with vegetation, and the excavated pool filled in with sediment; it is unclear if the pasture was rested during this period. Nonetheless, the positive relationship between dace abundance and open water (Scheerer *et al.* 2016, p. 8) illustrates the need for periodic vegetation removal to maintain appropriate habitat for the Foskett speckled dace (Scheerer *et al.* 2014, p. 9).

Sometime in fall and/or winter of 2014 to 2015, unauthorized cattle grazing occurred in both the Foskett and Dace spring exclosures (Leal 2015, pers. comm.). Cattle accessed the site after a gate was removed illegally. Based on photos provided by the BLM, it appears the vegetation utilization was sporadic although heavy in some areas, but damage to Foskett and Dace springs' streambanks appeared inconsequential. The BLM has replaced the gate and will continue to maintain the fence per their commitments outlined in the CMP (USFWS *et al.* 2015). Although cattle did access the Foskett and Dace spring sites, over time these exclosures have sufficiently protected Foskett and Dace springs from damage from livestock grazing. The quarterly site visits committed to by the BLM in the CMP will increase the ability to detect and remedy any future issues with open gates or downed fences. However, due to the remoteness of the site it is possible unauthorized grazing within the enclosures may infrequently occur in the foreseeable future. Given the results of previous monitoring of grazing within the enclosures we do not view grazing in the enclosure as a threat in the foreseeable future.

Field surveys conducted from 2005 through 2015 at Foskett Spring did not reveal any sign of artificial channeling of water or mechanized impacts beyond the remnants of historical activities (*i.e.*, two small rock cribs and side-casting of material around the spring). The habitat at Foskett Spring is extremely limited, and past encroachment by aquatic vegetation has reduced the area of open water. The decline in abundance of Foskett speckled dace from 1997 to 2011 (see Table 1, above) was likely due to the reduction in open-water habitat (Scheerer and Jacobs 2005, pp. 5, 7; Scheerer *et al.* 2012, p. 8). Management to increase open-water habitat, while very effective in the short term, needs to be periodically repeated as sediment infilling and subsequent growth of aquatic vegetation is continuous. As such, periodic management will be needed in perpetuity to maintain high-quality habitat for the Foskett speckled dace.

The ODFW recommended that restoration efforts to increase open-water habitat are needed to increase carrying capacity for Foskett speckled dace (Scheerer and Jacobs 2007, p. 9; Scheerer and Jacobs 2009, pp. 5-6). Restoration efforts were conducted at Foskett Spring in 2013 and 2014, and resulted in a 164 percent increase in open-water habitat and a peak population estimate in 2014 of 24,888 individuals (Scheerer *et al.* 2016, pp. 8-9). Periodic habitat maintenance at Foskett and Dace springs will be necessary to maintain open-water habitat for the Foskett speckled dace. The BLM, ODFW, and Service have committed to periodic habitat maintenance in the CMP signed in August 2015. As noted earlier in this proposed rule, the CMP identifies actions such as protection of the aquatic habitat and surrounding land; management of the habitat to ensure continued persistence of important habitat features; monitoring of the fish populations and habitat; and implementation of an emergency contingency plan in case of

nonnative introduction, pollutants, or other unforeseen threats. Implementation of these actions will significantly reduce or eliminate threats related to destruction, modification or curtailment of the Foskett speckled dace's habitat or range. It is reasonable to conclude the CMP will be implemented into the foreseeable future for the reasons summarized in the *Recovery Planning and Recovery Criteria* discussion, above.

Mechanical modification and livestock watering uses are no longer considered a threat since the BLM acquired the property containing both Foskett and Dace springs and constructed a fence to exclude cattle from a majority of the habitat. We anticipate continued monitoring and maintenance of the exclusion fence into the foreseeable future by the BLM based on their commitments in the CMP and their long record of conservation management of habitat at Foskett and Dace springs.

Pumping of Groundwater and Lowering of the Water Table

Streams and lakes in and around the Warner Basin have produced a variety of unconsolidated Pliocene to Holocene sediments that have accumulated and contribute to the structure of the aquifer (Gonthier 1985, p. 17). Wells in other portions of the Warner Basin utilizing these Pleistocene lake bed aquifers tend to have low to moderate yields. Pleistocene lake bed deposits of clay, sand, and diatomaceous earth (*i.e.*, soft, crumbly soil formed from the fossil remains of algae) have a thickness of up to 200 ft (60 m) (Gonthier 1985, pp. 38-39; Woody 2007, p. 64). Hydraulic conductivity (*i.e.*, ease with which a fluid can move) in these sediments ranges from 25 to 150 ft per day (7.6 to 46 m per day); while transmissivity (horizontal groundwater flow) in valleys in this sediment-filled basin and range region of Oregon, such as the Warner Valley aquifer system, ranges from 1,000 to 15,000 square feet (ft²) (92.90 to 1,393.55 square meters (m²)) per

day (Gonthier 1985, p. 7). This is considered a poor quality aquifer with limited capability to produce water for domestic or stock use (Gonthier 1985, p. 7). Therefore, few wells exist in the Warner Valley and are not likely to impact Foskett or Dace spring.

We have no evidence of groundwater pumping in the area. A query of the Oregon Water Resources Department database for water rights did not reveal any wells within 5 mi (8 km) of Foskett Spring. The closest well listed in the database is 5.9 mi (9.5 km) away along Twentymile Creek. No other wells were located closer to Foskett Spring.

There are no Oregon Water Resources Department records of water rights in the vicinity of either spring. Any development of water resources and filing of water rights on BLM lands would require a permit (BLM 2003), and we anticipate the likelihood of the BLM receiving a permit request related to a new water right in the future would be low. Although groundwater pumping was identified as a potential threat at the time of listing, we have determined this is not currently a threat and is not anticipated to be a threat in the foreseeable future.

Habitat Enhancement and Creation of a Refuge Population

To assess the effects of management on reducing the encroachment of aquatic vegetation at Foskett Spring and the response of fish to increased open water, the BLM conducted a controlled burn in 2013 in the tule and cattail marsh to reduce plant biomass (Scheerer *et al.* 2014, p. 9). In 2013 and 2014, the BLM excavated pools to increase open-water habitat. The response of dace to these restoration efforts was remarkable with the 2014 population estimate being 24,888 (19,250–31,500; 95 percent confidence interval) fish, and most of these fish occupied the restored marsh areas. The population data indicate that fluctuations in abundance and population trends are tied to the

availability of open water (Scheerer *et al.* 2016, p. 8) and illustrate the need for periodic management to maintain open-water habitat.

Habitat restoration at Dace Spring followed by translocations of dace has resulted in a second subpopulation of Foskett speckled dace. Two ponds were created and connected to the outlet channel of Dace Spring, and Foskett speckled dace were translocated to the ponds. The 2016 population estimate was 1,964 fish, which is a substantial increase from the 2013 estimate of 34 fish. The estimate includes the 200 dace that were transplanted from Foskett Spring in 2013 (Scheerer et al. 2014, p. 6). The 2017 population estimate in Dace Spring was 15,729 (CI: 12,259 – 58,479)(Scheerer et. al. 2017, p. 6). Although the broad confidence limits infer low precision, even the lowend of the confidence limit (12,259) represents a significant increase over the 2016 estimate of 1,964 individuals. Reproduction at Dace Spring was documented by the ODFW in 2014 (Scheerer et al. 2014, p. 6) and in 2015 (Scheerer et al. 2015, p. 5). The ODFW is evaluating the long-term status of the Dace Spring population. Although results are positive, it is premature to conclude if establishment of this refuge population will be successful over the long term. While our proposal to delist Foskett speckled dace is not dependent on establishment of a refuge population, the redundancy of a second population of Foskett speckled dace at Dace Spring, should it prove viable over the long term, provides increased resiliency to the species' overall status and may reduce vulnerability to stochastic events and any future threats that may appear on the landscape. Summary of Factor A

Securing long-term habitat protections (Recovery Criterion 1) and developing and implementing long-term management techniques (Recovery Criterion 2) are important

recovery criteria for this species, and many of the factors discussed above fulfill these criteria, which also were identified in the most recent 5-year review (USFWS 2015, entire). Acquisition of the property by the BLM has facilitated the recovery of Foskett speckled dace. The recent habitat enhancement work and the commitments made in the CMP provide assurance that with minor oversight and continued habitat enhancement by the BLM and ODFW, the species is not likely to become an endangered species in the foreseeable future. Although the CMP is voluntary, it is reasonable to conclude, for reasons summarized in the *Recovery Planning and Recovery Criteria* discussion above, that the plan will be implemented by all three cooperating agencies for the foreseeable future.

Based on the best available information and confidence that current management will continue into the future as outlined in the CMP, we conclude that the present or threatened destruction, modification, or curtailment of habitat or range does not constitute a substantial threat to the Foskett speckled dace, now or in the foreseeable future.

Factor B. Overutilization for Commercial, Recreational, Scientific, or Educational

Overutilization for commercial, recreational, scientific, or educational purposes was not a factor in listing and, based on the best available information, we conclude that it does not constitute a substantial threat to the Foskett speckled dace now or in the foreseeable future.

Factor C. Disease or Predation

Purposes

The original listing in 1985 states, "There are no known threats to . . . Foskett speckled dace from disease or predation" (50 FR 12304; March 28, 1985). During the

2005 and 2011 population surveys, the ODFW biologist noted that: "[t]he fish appear to be in good condition with no obvious external parasites" (Scheerer and Jacobs 2005, p. 7; Scheerer 2011, p. 6). During the 2007 and 2009 population surveys, the ODFW noted that the Foskett speckled dace appeared healthy and near carrying capacity for the available habitat at that time (Scheerer and Jacobs 2007, p. 8; 2009, p. 5). We have no additional information that would change this conclusion.

The CMP includes quarterly field visits to Foskett and Dace springs to determine general health of the local spring environment and to identify threats that necessitate implementation of the emergency contingency plan, which could include the detection of disease and introduced predators. The emergency contingency plan describes steps to be taken to secure Foskett speckled dace in the event their persistence is under immediate threat (*e.g.*, from introduction of nonnative fish that may threaten them due to predation or act as a disease vector).

Summary of Factor C

Based on the best available information, we conclude that disease and predation do not constitute substantial threats to the Foskett speckled dace now or in the foreseeable future.

Factor D. The Inadequacy of Existing Regulatory Mechanisms

Under this factor, we examine whether existing regulatory mechanisms are inadequate to address the threats to the Foskett speckled dace discussed under other factors. Section 4(b)(1)(A) of the Act requires the Service to take into account "those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species." In relation to Factor D under the Act, we

interpret this language to require us to consider relevant Federal, State, and Tribal laws, regulations, and other such mechanisms that may minimize any of the threats we describe in the threats analyses under the other four factors, or otherwise enhance conservation of the species. We give strongest weight to statutes and their implementing regulations and to management direction that stems from those laws and regulations; an example would be State governmental actions enforced under a State statute or constitution, or Federal action under statute.

For currently listed species that are being considered for delisting, we consider the adequacy of existing regulatory mechanisms to address threats to the species absent the protections of the Act. We examine whether other regulatory mechanisms would remain in place if the species were delisted, and the extent to which those mechanisms will continue to help ensure that future threats will be reduced or minimized.

The 1985 listing rule states, "The State of Oregon lists . . . Foskett speckled dace as [a] "fully protected subspecies" under the Oregon Department of Fish and Wildlife regulations. These regulations prohibit taking of the fishes without an Oregon scientific collecting permit. However, no protection of the habitat is included in such a designation and no management or recovery plan exists [for the Foskett speckled dace]" (50 FR 12304; March 28, 1985).

The Foskett speckled dace was listed as threatened by the State of Oregon in 1987, as part of the original enactment of the Oregon Endangered Species Act (Oregon ESA). The listing designated Foskett speckled dace as a "protected species" and prohibited take or possession unless authorized by a permit. The Oregon ESA prohibits the "take" (kill or obtain possession or control) of State-listed species without an

incidental take permit. The Oregon ESA applies to actions of State agencies on State-owned or -leased land, and does not impose any additional restrictions on the use of Federal land. In recognition of the successful conservation actions and future management commitments for the Foskett speckled dace and its habitat, the Oregon Fish and Wildlife Commission (OFWC) ruled to remove Foskett speckled dace from the State List of Threatened and Endangered Species on April 21, 2017.

The ODFW's Native Fish Conservation Policy calls for the conservation and recovery of all native fish in Oregon (ODFW 2002), including Foskett speckled dace, now listed as sensitive on the ODFW's sensitive species list. The Native Fish Conservation Policy requires that the ODFW prevent the serious depletion of any native fish species by protecting natural ecological communities, conserving genetic resources, managing consumptive and non-consumptive fisheries, and using hatcheries responsibly so that naturally produced native fish are sustainable (OAR 635-007-0503). The policy is implemented through the development of collaborative conservation plans for individual species management units that are adopted by the OFWC. To date, the ODFW has implemented this policy by following the federally adopted recovery plan and will continue to conserve Foskett speckled dace according to the State rules for conserving native fish and more specifically the commitments made by the ODFW in the CMP. The State of Oregon Wildlife Diversity Plan (OAR 635-100-0080), Oregon Native Fish Conservation Policy (OAR 636-007-0502), and the Oregon Conservation Strategy (ODFW 2016) provide additional authorities and protective measures for the conservation of native fish, including the Foskett speckled dace.

Additionally, the CMP, prepared jointly and signed by the ODFW, BLM, and Service, will guide future management and protection of the Foskett speckled dace, regardless of its State or Federal listing status. The CMP, as explained in more detail in the *Recovery Planning and Recovery Criteria* discussion above, identifies actions to be implemented by the Service, BLM, and ODFW to provide for the long-term conservation of the Foskett speckled dace (Recovery Criterion 2).

The approach of developing an interagency CMP for the Foskett speckled dace to promote continued management post-delisting is consistent with a "conservation reliant species," described by Scott *et al.* (2005, pp. 384-385) as those that have generally met recovery criteria but require continued active management to sustain the species and associated habitat in a recovered condition. A key component of the CMP is continued management of aquatic vegetation, as necessary, to promote open-water habitat important to the species' long-term viability.

Finally, the BLM manages the 160-ac (65-ha) parcel of land containing the Foskett and Dace spring sites consistent with the Lakeview District's RMP (BLM 2003), which provides general management guidelines for Special Status Species, and specifically states that the BLM will manage the Foskett speckled dace and its habitat consistent with the species' 1998 recovery plan.

Summary of Factor D

In our discussion under Factors A, B, C, and E, we evaluate the significance of threats as mitigated by any conservation efforts and existing regulatory mechanisms.

Regulatory mechanisms may reduce or eliminate the impacts from one or more identified threats. Where threats exist, we analyze the extent to which conservation measures and

existing regulatory mechanisms address the specific threats to the species. The existence of regulatory mechanisms like the Lakeview District BLM's RMP, State conservation measures such as the Oregon Native Fish Conservation Strategy, along with the other authorities supporting each cooperating agency's entrance into the CMP agreement, reduce risk to the Foskett speckled dace and its habitat. As previously discussed, conservation measures initiated by the State of Oregon and the BLM under the CMP manage potential threats caused by activities such as illegal livestock grazing and trampling. For the reasons discussed above, we anticipate that the conservation measures initiated under the CMP will continue through at least the foreseeable future, which we have defined as 30 years. Consequently, we find that conservation measures, along with existing State and Federal regulatory mechanisms, are adequate to address these specific threats absent protections under the Act.

Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

The original listing rule in 1985 states, "Additional threats include the possible introduction of exotic fishes into the springs, which could have disastrous effects on the endemic. Foskett speckled dace, either through competitive exclusion, predation, or introduced disease. Because these fishes occur in such limited and remote areas, vandalism also poses a potential threat" (50 FR 12304; March 28, 1985).

No exotic fish introduction or acts of vandalism have occurred since the time of listing. The Foskett speckled dace is vulnerable to invasive or nonnative species (aquatic plants, invertebrates, or fish species). However, this vulnerability is reduced in part due to the remoteness of the site and the lack of recreational or other reasons for the public to visit the area. It is also reduced by the establishment of a refuge population in Dace

Spring. While the risk of introductions is low, the potential impact is high due to the highly restricted distribution of the Foskett speckled dace. The CMP includes quarterly monitoring and an emergency contingency plan to address potential threats from introduction of nonnative species or pollutants. Although the introduction of an exotic species represents a potential threat to the Foskett speckled dace, we believe the risk is low based on the isolation of the site, the minimal visitor use of the springs, the lack of connectivity to other waterways, and the monitoring agreed to and occurring in accordance with the CMP.

Other Risk Factors

A species' habitat requirements, population size, and dispersal abilities, among other factors, help to determine its vulnerability to extinction. Key risk factors include small population size, dependence on a rare habitat type, inability to move away from sources of stress or habitat degradation, restrictions to a small geographic area, and vulnerability to catastrophic loss resulting from random or localized disturbance (Williams *et al.* 2005, p. 27). The Service listed the Foskett speckled dace in 1985 (50 FR 12302; March 28, 1985), in part due to these factors. This species had a very restricted natural range, it occurred in low numbers in a small spring that was extremely vulnerable to destruction or modification due to its small size, and a water flow rate of less than 0.5 ft³ per second (0.01 m³ per second). Additionally, the habitat upon which the Foskett speckled dace depends is fragile and has been affected by past livestock grazing and mechanical modification.

Small Population Size

Surveys by the ODFW from 2005 through 2017 have documented that the number of Foskett speckled dace vary considerably through time and by habitat type (see Table 1, above), and available open-water habitat, which fluctuates annually, appears to be the key factor in determining the population size of this species (Scheerer *et al.* 2016, p. 8). The lowest population estimate was 751 fish (using the Lincoln-Petersen model) in 2011, and no individuals were documented in the cattail marsh that year (see Table 1, above).

Management to create more open water in the marsh habitat at Foskett Spring was initiated in 2012 and completed in 2014, increasing the amount of open-water habitat by 150 percent, to approximately 358 yds² (300 m²) (Scheerer *et al.* 2016, pp. 7-9). The increase in fish abundance in 2013 through 2015 was notable, especially in the two habitats where management occurred (see Table 1, above).

Based on the relationship between the amount of open water and the number of Foskett speckled dace, the CMP includes removing encroaching vegetation to enhance open-water habitat, and excavating open-water pools. These activities will be conducted every 5 to 10 years or as determined necessary to maintain open-water habitat to support healthy populations of Foskett speckled dace.

Additionally, the ongoing effort by the BLM and the Service to restore Dace Spring provides the potential for a refuge population of Foskett speckled dace. Two ponds have been created and connected to the outlet channel of Dace Spring; Foskett speckled dace have been translocated to the ponds (see Table 2, above). Reproduction and an associated population increase was documented by the ODFW in 2014, 2015, 2016, and 2017. The ODFW is currently evaluating the status of the Foskett speckled dace in the new ponds, and, although results are positive, it is premature to predict long-

term viability of the Dace Spring population. While our proposal to delist Foskett speckled dace is not dependent on the establishment of a refuge population, the redundancy of a second population of Foskett speckled dace provides additional robustness to the species' overall status.

Dependence Upon a Specific Rare Habitat Type and Inability to Disperse

This species is known to occupy only Foskett Spring and Dace Spring. Due to the small size of Foskett Spring and the lack of connectivity to other aquatic habitat, there is no opportunity for the Foskett speckled dace to disperse away from stress, habitat degradation, or disturbance factors. There are no streams or drainages or other aquatic connections that provide alternate habitat or allow for emigration. As noted previously in this proposed rule, the BLM created two new ponds connected to the outlet channel of Dace Spring, and the ODFW has introduced Foskett speckled dace into these ponds in an attempt to establish a refuge population.

Restriction to a Small Geographic Area and Vulnerability to Stochastic Events

The Foskett speckled dace is restricted to one small spring and has been translocated to two small, constructed ponds at an adjacent spring. The available openwater habitat at Foskett Spring is naturally limited, and encroaching aquatic vegetation periodically limits suitable habitat. However, removing sediments and vegetation to increase open-water habitat is a proven conservation measure that results in a significant increase in fish abundance. Because of its restricted natural distribution and dependence on a single water source, the Foskett speckled dace is more vulnerable to threats that may occur than species that are more widely distributed. While our proposal to delist Foskett speckled dace is not dependent on the existence of a second population, the redundancy

of a second population of Foskett speckled dace, should it prove viable over the long term, increases the resiliency of the species and may reduce vulnerability to stochastic events and any future threats that may appear on the landscape.

Additionally, the CMP provides for management of Foskett Spring and Dace Spring areas for the long-term conservation of the Foskett speckled dace. Although it is difficult to plan for and address catastrophic events, quarterly site visits and habitat and population surveys conducted regularly will facilitate the timely detection of changes to the habitat and as well as other unforeseen future threats.

Effects of Climate Change

We also analyzed the effects of changing climate to the Foskett speckled dace and its habitat. The terms "climate" and "climate change" are defined by the Intergovernmental Panel on Climate Change (IPCC). "Climate" refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements, although shorter or longer periods also may be used (IPCC 2007, p. 78). The term "climate change" thus refers to a change in the mean or variability of one or more measures of climate (*e.g.*, temperature or precipitation) that persists for an extended period, typically decades or longer, whether the change is due to natural variability, human activity, or both (IPCC 2007, p. 78). Changes in climate can have direct or indirect effects on species, may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations such as the effects of interactions of climate with other variables (*e.g.*, habitat fragmentation) (IPCC 2007, pp. 8–14, 18–19). In our analyses, we used our expert judgment to weigh

relevant information, including uncertainty, in considering the effects of climate change on the Foskett speckled dace.

Global climate projections are informative and, in some cases, the only or the best scientific information available for us to use. However, projected changes in climate and related impacts can vary substantially across and within different regions of the world (IPCC 2007, pp. 8–12). Therefore, we use "downscaled" projections when they are available and have been developed through appropriate scientific procedures because such projections provide higher-resolution information that is more relevant to spatial scales used for analyses of a given species (see Glick *et al.* 2011, pp. 58–61, for a discussion of downscaling).

Downscaled projections were available for our analysis of the Foskett speckled dace from the U.S. Geological Survey (USGS)

(https://www2.usgs.gov/climate_landuse/clu_rd/nccv/viewer.asp). The National Climate Change Viewer is based on the mean of 30 models which can be used to predict changes in air temperature for the Warner Lakes basin in Lake County, Oregon. The models predict an increase in the mean maximum air temperature of 3.2 °F (1.8 °C) and an increase in the mean annual minimum air temperature of 3.1 °F (1.7 °C) in the 25-year period from 2025 to 2049. Mean precipitation is not predicted to change, but annual snow accumulation is predicted to decrease by 0.4 in (10.16 millimeters (mm)) during the same period.

Over the ensuing 25-year period from 2050 to 2074, the mean annual maximum air temperature is predicted to increase by 4.9 degrees °F (2.7 °C), and the change in mean annual minimum air temperature is predicted to increase by 4.3 °F (2.4 °C). The

2050 to 2074 model predicts no change in the mean annual precipitation and annual snow accumulation is predicted to decrease by 0.4 in (9.6 mm) for the Warner Lakes basin (Alder and Hostetler 2013, entire).

Increase in the ambient air temperature may cause slight warming of Foskett Spring surface water. This may reduce the overall amount of habitat available for Foskett speckled dace due to an increase in water temperatures, especially at the lower end of the outlet stream and marsh habitat; however, Foskett speckled dace prefer the spring and pool habitats through the stream portion of the outlet channel. Changes to precipitation, aquifer recharge, or vegetative community around Foskett Spring as a result of climate change would not likely have an impact on Foskett speckled dace. The occupied habitat is fed from a spring that has a fairly consistent temperature of approximately 65 °F (18 °C), and the vegetative community is not likely to change from the predicted temperature increases.

Summary of Factor E

The original listing rule in 1985 (50 FR 12302; March 28, 1985) identified introduction of exotic fishes as a potential threat. However, in over 30 years of monitoring, no exotic fishes have been detected, and there is no evidence of attempts to introduce exotic fish species. Other potential threats such as small population size, dependence on a specific or rare habitat type, the inability to disperse, restriction to a small geographic area, vulnerability to stochastic events, and climate change also have been assessed and determined to be minimal. Based on the best available information, we conclude that other natural or manmade factors do not constitute a substantial threat to the Foskett speckled dace now or in the foreseeable future.

Cumulative Impacts

Together, the factors discussed above could result in cumulative impacts to the Foskett speckled dace. For example, effects of cattle grazing directly on the habitat in combination with mechanical disturbances could result in a greater overall impact to Foskett speckled dace habitat. Although the types, magnitude, or extent of cumulative impacts are difficult to predict, we are not aware of any combination of factors that have not already been, or would not be, addressed through ongoing conservation measures that are expected to continue post-delisting and into the future, as described above. The best scientific and commercial data available indicate that the species is relatively abundant, and that the factors are not currently resulting, nor are they anticipated to cumulatively result, in reductions in Foskett speckled dace numbers and/or to the species' habitat.

Proposed Determination of Species Status

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for determining whether a species is an endangered species or threatened species and should be included on the Federal Lists of Endangered and Threatened Wildlife and Plants (listed). The Act defines an endangered species as any species that is "in danger of extinction throughout all or a significant portion of its range" and a threatened species as any species "that is likely to become endangered throughout all or a significant portion of its range within the foreseeable future."

On July 1, 2014, we published a final policy interpreting the phrase "significant portion of its range" (SPR) (79 FR 37578). In our policy, we interpret the phrase "significant portion of its range" in the Act's definitions of "endangered species" and

"threatened species" to provide an independent basis for listing a species in its entirety; thus there are two situations (or factual bases) under which a species would qualify for listing: A species may be in danger of extinction or likely to become so in the foreseeable future throughout all of its range; or a species may be in danger of extinction or likely to become so throughout a significant portion of its range. If a species is in danger of extinction throughout an SPR, it, the species, is an "endangered species." The same analysis applies to "threatened species."

Our final policy addresses the consequences of finding a species is in danger of extinction in an SPR, and what would constitute an SPR. The final policy states that (1) if a species is found to be endangered or threatened throughout a significant portion of its range, the entire species is listed as an endangered species or a threatened species, respectively, and the Act's protections apply to all individuals of the species wherever found; (2) a portion of the range of a species is "significant" if the species is not currently endangered or threatened throughout all of its range, but the portion's contribution to the viability of the species is so important that, without the members in that portion, the species would be in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range; (3) the range of a species is considered to be the general geographical area within which that species can be found at the time the Service or the National Marine Fisheries Service makes any particular status determination; and (4) if a vertebrate species is endangered or threatened throughout an SPR, and the population in that significant portion is a valid DPS, we will list the DPS rather than the entire taxonomic species or subspecies.

The SPR policy is applied to all status determinations, including analyses for the

purposes of making listing, delisting, and reclassification determinations. The procedure for analyzing whether any portion is an SPR is similar, regardless of the type of status determination we are making. The first step in our assessment of the status of a species is to determine its status throughout all of its range. Depending on the status throughout all of its range, we will subsequently examine whether it is necessary to determine its status throughout a significant portion of its range. If we determine that the species is in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range, we list the species as an endangered (or threatened) species and no SPR analysis will be required. The same factors apply whether we are analyzing the species' status throughout all of its range or throughout a significant portion of its range.

As described in our policy, once the Service determines that a "species"—which can include a species, subspecies, or distinct population segment (DPS)—meets the definition of "endangered species" or "threatened species," the species must be listed in its entirety and the Act's protections applied consistently to all individuals of the species wherever found (subject to modification of protections through special rules under sections 4(d) and 10(j) of the Act).

Thus, the first step in our assessment of the status of a species is to determine its status throughout all of its range. Depending on the status throughout all of its range, we will subsequently examine whether it is necessary to determine its status throughout a significant portion of its range. Under section 4(a)(1) of the Act, we determine whether a species is an endangered species or threatened species because of any of the following:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) Overutilization for commercial, recreational, scientific, or educational

purposes; (C) Disease or predation; (D) The inadequacy of existing regulatory mechanisms; or (E) Other natural or manmade factors affecting its continued existence. These five factors apply whether we are analyzing the species' status throughout all of its range *or* throughout a significant portion of its range.

Foskett speckled dace — Determination of Status Throughout All of its Range

We conducted a review of the status of Foskett speckled dace and assessed the five factors to evaluate whether Foskett speckled dace is in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range. We found that, with periodic management, Foskett speckled dace populations are persistent but cyclical within a range of 751 to 24,888 individuals over the last decade (Table 1). During our analysis, we found that impacts believed to be threats at the time of listing are either not as significant as originally anticipated or have been eliminated or reduced since listing, and we do not expect any of these conditions to substantially change post-delisting and into the foreseeable future, nor do we expect the effects of climate change to affect this species. The finalization of the CMP acknowledges the "conservation-reliant" nature of Foskett speckled dace and the need for continued management of the habitat at Foskett Spring and affirms the BLM, ODFW, and Service will continue to carry out long-term management actions. Long-term management actions and elimination and reduction of threats apply to all populations of the species, such that both populations are secure.

We conclude that the previously recognized impacts to the Foskett speckled dace no longer are a threat to the species. In order to make this conclusion, we analyzed the five threat factors used in making Endangered Species Act listing (and delisting) decisions.

Foskett speckled dace—Determination of Status Throughout a Significant Portion of its Range

Because we determined that Foskett speckled dace is not in danger of extinction or likely to become so in the foreseeable future throughout all of its range, we will consider whether there are any significant portions of its range in which the species is in danger of extinction or likely to become so. To undertake this analysis, we first identify any portions of the species' range that warrant further consideration. The range of a species can theoretically be divided into portions in an infinite number of ways. To identify only those portions that warrant further consideration, we determine whether there are any portions of the species' range: (1) that may be "significant," and (2) where the species may be in danger of extinction or likely to become so in the foreseeable future. We emphasize that answering these questions in the affirmative is not equivalent to a determination that the species should be listed—rather, it is a step in determining whether a more-detailed analysis of the issue is required.

If we identify any portions (1) that may be significant and (2) where the species may be in danger of extinction or likely to become so in the foreseeable future, we conduct a more thorough analysis to determine whether both of these standards are indeed met. The determination that a portion that we have identified does meet our definition of significant does not create a presumption, prejudgment, or other determination as to whether the species is in danger of extinction or likely to become so in the foreseeable future in that identified SPR. We must then analyze whether the species is in danger of extinction or likely to become so in the SPR. To make that determination, we use the same standards and methodology that we use to determine if a

species is in danger of extinction or likely to become so in the foreseeable future throughout all of its range (but applied only to the portion of the range now being analyzed).

We evaluated the range of the Foskett speckled dace to determine if any area may be significant. The Foskett speckled dace is endemic to Foskett Spring in the Warner Basin. The historical known natural range of the Foskett speckled dace is limited to Foskett Spring. At the time of listing in 1985, Foskett speckled dace also occurred at nearby Dace Spring, located approximately one-half mile south of Foskett Spring, where translocation of specimens from Foskett Spring was initiated in 1979. Because of its narrow range limited to two springs within half mile of each other, and because speckled dace currently occupying Dace Spring originated from translocations from Foskett Spring, we find that the species is comprised of is a single, population and there are no logical biological divisions delineating portions of the range. For this reason, we did not identify any portions that may be significant because of natural or biological divisions indicating biological or conservation importance.

A key part of identifying portions appropriate for further analysis is whether the threats are geographically concentrated. If a species is not in danger of extinction or likely to become so in the foreseeable future throughout all of its range and the threats to the species are essentially uniform throughout its range, then there is no basis on which to conclude that the species may be in danger of extinction or likely to become so in the foreseeable future in any portion of its range. Therefore, we also examined whether any threats are geographically concentrated in some way that would indicate the species may be in danger of extinction, or likely to become so, in a particular area. We conclude that

none of them are concentrated in any particular area of the species' range. Although some of the factors we evaluated in the Summary of Factors Affecting the Species section above occur in specific habitat types (i.e. the spring pool, stream habitat, and marsh habitat), the factors affecting the Foskett speckled dace occur at similarly low levels throughout its range and would affect all individuals of the population. Additionally, because the species acts as a single population, no portion is likely to have a different status or be differently affected by threats than any other portion or than that of the species throughout all of its range. Therefore, even if Foskett Spring and the nearby Dace Spring were considered to be separate portions of the species' range, no threats or their effects are sufficiently concentrated to indicate the species may be in danger of extinction, or likely to become so in either area. As noted earlier in this rule, our proposal to delist Foskett speckled dace is not dependent on establishment of a refuge population at Dace Spring. However, the redundancy of a second population of Foskett speckled dace at Dace Spring, should it prove viable over the long term, provides increased resiliency to the species' overall status and may reduce vulnerability to stochastic events and any future threats that may appear on the landscape. For these reasons, we conclude that the species is not in danger of extinction, or likely to become so, throughout a significant portion of its range.

Conclusion

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the Foskett speckled dace. The threats that led to the species being listed under the Act (primarily the species' extremely restricted and vulnerable habitat which was being modified; Factor A) have been

removed or ameliorated by the actions of multiple conservation partners over the past 30 years; these include securing the property and developing long-term management strategies to ensure that appropriate habitat is maintained. Given various authorities that enabled the three cooperating agencies to enter into the Foskett Speckled Dace CMP, and the long record of engagement and proactive conservation actions implemented by the three cooperating agencies over a 30-year period, we expect conservation efforts will continue to support a healthy viable population of the Foskett speckled dace post-delisting and into the foreseeable future. Because the species is not in danger of extinction now or in the foreseeable future throughout all of its range or any significant portion of its range, the species does not meet the definition of an endangered species or threatened species. We conclude the Foskett speckled dace no longer requires the protection of the Act, and, therefore, we are proposing to remove it from the Federal List of Endangered and Threatened Wildlife.

Effects of This Proposed Rule

This proposal, if made final, would revise 50 CFR 17.11(h) by removing the Foskett speckled dace from the Federal List of Endangered and Threatened Wildlife. Accordingly, we would also remove the Foskett speckled dace from the rule promulgated under section 4(d) of the Act at 50 CFR 17.44(j). The prohibitions and conservation measures provided by the Act, particularly through sections 7 and 9, would no longer apply to this species. Federal agencies would no longer be required to consult with the Service under section 7 of the Act in the event that activities they authorize, fund, or carry out may affect the Foskett speckled dace. No critical habitat has been designated for Foskett speckled dace, so there would be no effect to designated critical habitat. State

laws related to the Foskett speckled dace would remain in place and be enforced and would continue to provide protection for this species.

Post-delisting Monitoring

Service and in cooperation with the States, to implement a system to monitor for not less than 5 years for all species that have been recovered and delisted. The purpose of this requirement is to develop a program that detects the failure of any delisted species to sustain populations without the protective measures provided by the Act. If, at any time during the monitoring period, data indicate that protective status under the Act should be reinstated, we can initiate listing procedures, including, if appropriate, emergency listing.

A draft PDM plan has been developed for the Foskett speckled dace, building on and continuing the research that was conducted during the listing period. The draft PDM plan will be peer reviewed by specialists and available for public comment upon the publication of this proposed rule. Public and peer review comments submitted in response to the draft PDM plan will be addressed within the body of the plan and summarized in an appendix to the plan. The draft PDM plan was developed by the Service and ODFW. The draft PDM plan consists of: (1) A summary of the species' status at the time of proposed delisting; (2) an outline of the roles of PDM cooperators; (3) a description of monitoring methods; (4) an outline of the frequency and duration of monitoring; (5) an outline of data compilation and reporting procedures; and (6) a definition of thresholds or triggers for potential monitoring outcomes and conclusions of the PDM.

The draft PDM plan proposes to monitor Foskett speckled dace populations following the same sampling protocol used by the ODFW prior to delisting. Monitoring would consist of two components: Foskett speckled dace distribution and abundance, and potential adverse changes to Foskett speckled dace habitat due to environmental or anthropogenic factors. The PDM would continue for 9 years, which would begin after the final delisting rule is published. Monitoring through this time period would allow us to address any possible negative effects to the Foskett speckled dace.

The draft PDM plan identifies measurable management thresholds and responses for detecting and reacting to significant changes in the Foskett speckled dace's protected habitat, distribution, and persistence. If declines are detected equaling or exceeding these thresholds, the Service, in combination with other PDM participants, will investigate causes of these declines, including considerations of habitat changes, substantial human persecution, stochastic events, or any other significant evidence. The result of the investigation will be to determine if the Foskett speckled dace warrants expanded monitoring, additional research, additional habitat protection, or relisting as a threatened or endangered species under the Act. If relisting the Foskett speckled dace is warranted, emergency procedures to relist the species may be followed, if necessary, in accordance with section 4(b)(7) of the Act.

Required Determinations

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (a) Be logically organized;
- (b) Use the active voice to address readers directly;
- (c) Use clear language rather than jargon;
- (d) Be divided into short sections and sentences; and
- (e) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the names of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

National Environmental Policy Act

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), need not be prepared in connection with regulations pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994, Government-to-Government Relations with Native American Tribal Governments (59 FR 22951), Executive Order 13175, and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust

Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes.

We do not believe that any Tribes will be affected by this rule. However, we have contacted the Burns Paiute Tribe to coordinate with them regarding the proposed rule.

References Cited

A complete list of all references cited in this proposed rule is available at http://www.regulations.gov or upon request from the person listed under **FOR**

Authors

The primary authors of this proposed rule are staff members of the Service's Oregon Fish and Wildlife Office.

List of Subjects in 50 CFR Part 17

FURTHER INFORMATION CONTACT.

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, we hereby propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

AUTHORITY: 16 U.S.C. 1361-1407; 1531-1544; and 4201-4245, unless otherwise noted.

§ 17.11 [Amended]

2. Amend § 17.11(h) by removing the entry for "Dace, Foskett speckled" under FISHES from the List of Endangered and Threatened Wildlife.

§ 17.44 [Amended]

- 3. Amend § 17.44(j) by:
- a. Removing the words "and Foskett speckled dace (*Rhinichthys* osculus subspecies)" from the introductory text; and
- b. In paragraphs (j)(1) and (j)(2), removing the word "these" in both places it appears and adding in its place the word "this".

Dated:	November 15, 2017	

James W. Kurth
Deputy Director
for U.S. Fish and Wildlife Service
Exercising the Authority of the Director
for U.S. Fish and Wildlife Service

[FR Doc. 2017-28465 Filed: 1/3/2018 8:45 am; Publication Date: 1/4/2018]